

REMARKS

Applicants gratefully thank the Examiner for acknowledging both the claim for foreign priority in this Application as well as the previously-filed Information Disclosure Statements.

In response to the Office Action dated September 22, 2009, Applicants respectfully request reconsideration based on the amendments herein and at least the following remarks. Applicants submit that the claims as presented herein are in condition for allowance.

Claims 1-22 are pending in the present application (claims 1 and 13 being independent). Claims 13 and 14 have been amended herein, while new claims 23-25 have been added. Claims 1-12 were previously withdrawn, leaving claims 13-25 pending for reconsideration.

No new matter has been added by the amendments or new claims. Specifically, claim 13 has been amended only to provide antecedent basis support for the “substrate induced coagulation (SIC) coating method” and the “electrode substrate.” Support for the amendment to claim 14 can be found at page 4, line 5 of the as-filed specification, while support for the new claims may be found in FIGS. 1-2 and at pages 4-6 of the as-filed specification, as well as in originally-filed claims 4-7, for example.

Applicants respectfully request reconsideration of claims 13-25 based upon the amendments and at least the following remarks.

Information Disclosure Statement (IDS) Submitted September 3, 2009

Applicants respectfully request the Examiner’s consideration of the IDS filed on September 3, 2009.

Claim Rejections Under 35 U.S.C. §112

Claim 14 stands rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. Specifically, the Examiner states on pages 2-3 of the Office Action that claims 14 contains the word “titan,” which is not understood by the Examiner.

Applicants note that the Examiner is correct that “titan” as a “titanium-based material,” and more particularly it titanium. Thus, it is respectfully noted that claim 14 has been amended to change the word “titan” to “titanium.” No new matter has been added, as support can be found at least at page 4, line 5 of the as-filed specification. Moreover, Applicants respectfully note that “titan” is a well-known term used for “titanium” (see, e.g., US 6,858,177 to Kono.)

Accordingly, it is respectfully requested that the above rejections to claim 14 under 35 U.S.C. § 112, second paragraph, be withdrawn.

Claim Rejections Under 35 U.S.C. §102

To anticipate a claim under 35 U.S.C. § 102, a single source must contain all of the elements of the claim. *Lewmar Marine Inc. v. Barient, Inc.*, 827 F.2d 744, 747, 3 U.S.P.Q.2d 1766, 1768 (Fed. Cir. 1987), cert. denied, 484 U.S. 1007 (1988). Furthermore, the single source must disclose all of the claimed elements “*arranged as in the claim.*” *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984) (Emphasis added).

Claims 13-19 and 22 are rejected under 35 U.S.C. 102(b) as being allegedly anticipated by Besenhard et al. (U.S. Pat. 5,916,485, hereinafter “Besenhard.”) Applicants respectfully traverse for at least the following reasons.

Applicants respectfully note that Besenhard teaches, primarily at columns 7 and 8, the SIC coating method onto non-conductive fibers or powders to introduce conductivity into those fibers or powders, and thus obtain conductive particles, which may then be used as a conductive material. Besenhard is completely silent, however, LGC-R-04-0039-US1
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regarding, for example, using the SIC coating method to deposit active and/or conductive layers (or a composite layer thereof) onto the surface of an electrode substrate.

In contrast and in accordance with the present invention, as specifically recited in as-filed claim 13, the SIC coating method is used to deposit active and/or conductive layers (or a composite layer thereof) onto the electrode substrate, to produce an electrode having a substantially thinner and/or uniform active material layer, conductive material layer, or composite layer thereof. Moreover, as noted by the Applicants at page 3, lines 21-23 of the as-filed application, “no example exists of preparing an electrode where layers of active material and conductive material are formed on the surface of an electrode substrate using the SIC coating method.”

Thus, the coating target of the SIC coating method of the present invention differs over that of Besenhard, resulting in an electrode having a thinner (and more uniform) thickness of the active material layer, the conductive material layer, and/or the composite layer, thereby providing superior electro-chemical performance of the electrode according to the present invention.

Therefore, Besenhard does not teach or suggest “preparing a layer of active material, a layer of conductive material, or a composite layer including an active material and a conductive material onto the surface of the electrode substrate using a substrate induced coagulation (SIC) coating method” as in independent claim 13. As a result, Besenhard does not disclose all of the claimed elements arranged as in claim 13.

Thus, it is respectfully submitted that claim 13, including claims depending therefrom, i.e., claims 14-25, define over Besenhard.

Accordingly, it is respectfully requested that the above rejection to claims 13-19 and 22 under 35 U.S.C. § 102(b) be withdrawn.

Claim Rejections Under 35 U.S.C. § 103

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art and that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over determining where the optimum combination of percentages. Specifically, the Examiner states that Besenhard teaches all elements of claims 20 and 21 except “the w/w % of the polyelectrolyte or the amounts of material contained in the dispersion,” which the Examiner further states prima facie obvious, in that determining where the optimum combination of percentages is not inventive. Applicants respectfully traverse for at least the following reasons.

Independent claim 13, from which claims 20 and 21 depend, is submitted as being allowable for defining over Besenhard, as discussed above.

Furthermore, it is respectfully submitted that “the w/w % of the polyelectrolyte or the amounts of material contained in the dispersion,” as allegedly would have been obvious, does not cure the deficiencies noted above with respect to Besenhard.

Thus, Applicants respectfully submit that claims 20-21 of the present invention are patentable over the cited references. Applicants further respectfully disagree with the Examiner’s allegation that “the w/w % of the polyelectrolyte or the amounts of material contained in the dispersion” would have been obvious, and hereby respectfully reserve the right to illustrate additional reasons for such non-obviousness, such as criticality of the claimed range, for example, should the need arise.

Accordingly, it is respectfully requested that the rejection of claims 20-21 under 35 U.S.C. § 103(a) be withdrawn.

Conclusion

In view of the foregoing remarks distinguishing the prior art of record, Applicants respectfully submit that this application is in condition for allowance. Early notification to this effect is requested. The Examiner is invited to contact Applicants' attorneys at the below-listed telephone number regarding this Amendment or otherwise regarding the present application in order to address any questions or remaining issues concerning the same.

If there are any charges due in connection with this response, including for any added claims and/or any necessary extensions of time under 37 C.F.R. 1.136(a) or 1.136(b), such as for the one-month extension for which the Applicants hereby respectfully petition, please charge them to Deposit Account 06-1130.

Respectfully submitted,

CANTOR COLBURN LLP

By: /Noah J. Hayward/
James J. Merrick
Registration No. 43,801
Noah J. Hayward
Registration No. 59,515
Cantor Colburn LLP
1800 Diagonal Rd, Ste 510
Alexandria, VA 22314
Telephone (703) 236-4500
Customer No. 23413

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